

FIG. 4A

1 CGGAGAAGGATGGCAGCAGGGGCGAGTGGTCCGAGCCTGGATGCTAGTCTCAGTCTGGGG 60
M A A G A V V G A W M L V L S L G

61 GGGACAGTCAAGGGGGACCAAAACATCACAGCCGGATCGGGAAGCCACTGGTGTGAAC 120
G T V T G D Q N I T A R I G K P L V L N

121 TGCAAGGGAGCCCCCAAGAAACCCCGAGCAGCTGGAATGGAAACTGAACACAGGGCCGG 180
C K G A P K K P P Q Q L E W K L N T G R

181 ACAGAAGCTTGGAAAGCTGTCTCTCCCGAGGAGACCCCTGGATAGCTGGCTCGGGTC 240
T E A W K V L S P Q G D P W D S V A R V

241 CTCCCAAGGGCTCCCTCTCTCTCCCGCTGTGGGATCCAGGATGAGGGGACTTTCGGG 300
L P N G S L L L L P A V G I Q D E G T F R

301 TGGCGGGCAACGAGCCGAGCGGGAAGGAGACCAAGTCTAACTACCGAGTCCGAGTCTAT 360
C R A T S R S G K E T K S N Y R V R V Y

361 CAGATTCTGGGAAGCCAGAAATTTGTATCTCTGGCTCTGAAGTCAATGGCTGGTTCGCC 420
Q I P G K P E I V D P A S E L M A G V P

421 AATAAGTGGGACATGTGTCTCCGAGGGGGCTACCTCCAGGGACTCTTAAGTGGCTC 480
N K V G T C V S E G G Y P A G T L N W L

481 TTGGATGGGAAACTCTGATCTCTGATGGCAAGGAGTGTCAAGTGAAGGAAGAGACCAAG 540
L D G K T L I P D G K G V S V K E E T K

541 AGACACCCAAAGACAGGGCTTTTCAAGCTCATTCCGAGCTGATGGTGAAGCCAGCTCGG 600
R H P K T G L F T L H S E L M V T P A R

601 GGAGGAGCTCTCCAGCCAGCTTCTCTGTAGCTTCAAGCTTGGCTTCCCGGCGCCGA 660
G G A L H P T T F S C S F T P G L P R R R

661 GCGCTGCACACGGGCCCCATCCAGCTCAGGGTCTGGAGTGAGCAGGAGTGGGAGGGC 720
A L H T A P I Q L R V W S E H R G G E G

721 CCCAAGCTGGAGCTGTGCCACTGAAGGAAGTCCAGTTGGTGGTAGAGCCGAAGGGGGA 780
P N V D A V P L K E V Q L V V E P E G G

781 CAGTAGCTCTCTGGTACTGTGACCTTGACCTGTGAAGCCCGCCCGCAGCCCCACCT 840
A V A P G G T V T L T C E A P A Q P P P

841 CAAATCCAATGGATCAAGGATGGCAGGGCCCTGCCCTTCCCTTGGCCCATGCTGCTC 900
Q I H W I K D G R P L P L P P G P M L L

901 CTCCCAAGGATAGGGCTGAGGACAGGGAACCTACAGTTGTGTGGCCACCCATCCAGC 960
L P E V G P E D Q G T Y S C V A T H P S

961 CATGGGGCCAGGAGAGCGCTGCTGTAGGCTCAGCATCATCGAAACAGGCGAGGAGGGG 1020
H G P Q E S R A V S V T I I E T G E E G

1021 ACGACTCGAGGCTCTGTGGAGGGCGGGGCTCGAAACCTAGCCCTGACCTGGGATC 1080
T T A G S V E G P G L E T L A L T L G I

1081 CTGGGAGGCTGGGGACAGTCCGCTTGTCTATTGGGCTCATCTGTGGCATCGAAGGGG 1140
L G G L G T V A L L I G V I V W H R R R

1141 CAACGCAAGGACAGGAGGAGGAGTCCCGGAAACAGGAGGAGGAAGAGGAGGAGAGA 1200
Q R K G Q E R K V P E N Q E E E E E E R

1201 CGCGAAGTGAACGAGCCGAGGAGCCGAGGGCGGAGAGAGCAGCAGGAGGGGCTTGA 1260
A E L N Q P E E P E A A E S S T G G P *

1261 GGAGCCAGCGCCAGACCCGATCATCAGCCCTTTTCTTTTCCACACTCTGTCTCTGGC 1320

1321 CCCAGACAGTCTCTCTCTGTATAATCTCCAGCCACATCTCCCAAACTTCTTCCACAA 1380

1381 CCAGAGCCTCCACAAAAGTGTAGTAAACACCTGCCACATTTAAAAAAAAAAAAA 1440

FIG. 4B

1 GGGGCAGCGCGAACAGCAGTGGAGCCTGGTGCTGCTCAGTCTGTGGGGGGCAGTA 60
G A A G T A V G A W V L V L S L W G A V

61 GTAGGTGCTCAAAACATCACAGCCCGGATGGCGAGCCAGTGGTGTGAAGTGAAGGGV 120
V G A Q [N I T] A R I G E P L V L K C K G

121 GCGCCCAAGAAACACCCAGCGGCTGGAATGGAAATGAACACAGSCCGGACAGAAGCT 180
A P K K P P Q R L E W K L N T G R T E A

181 TGGAGGTCTCTCTCCAGGGAGGAGGCCCTGGGACAGTGTGGCTGTCTCTCTCCC 240
W K V L S P Q G G G P W D S V A R V L P

241 AACGGTCTCTCTCTCCGCTGTGGGATCCAGGATGAGGGGATTTCCGGTGCAGG 300
[N G S] L F L P A V G I Q D E G I F R C R

301 GCAATGAACAGGAATGGAAGGAGACCAAGTCCAACTACCGAGTCCGTGTCTACAGATT 360
A M N R N R N G K E T K S N Y R V R V Y Q I

361 CCTGGGAAGCCAGAAATGTGATTTCTGCTCTGAACTCAGGCTGGTGTTCCTCAATAAG 420
P G K P E I V D S A S E L T A G V P N K

421 GTGGGACATGTGTGTGAGGGAAGCTACCTGCGAGGACTTTAGCTGGCACTTGGAT 480
V G T C T V S E G S Y P A G T L S W H L D

481 GCGAAGCCCTGGTGGCTAATGAGAAGGAGTATCTGTGAAGGAACACAGGAGACAC 540
G K P L V P N E K G V S V K E Q T R R H

541 CCTGAGACAGGGCTCTTACACTGCAGTGGAGCTAATGGTACCCACCGCCGGGGAGGA 600
P E T G L F T L Q S E L M V T P A R G G

601 GATCCCCGTCCACCTTCTCTGTAGCTTCAGCCAGGCTTCCCGACACCGGGCCTTC 660
D P R P T F S C S F S P G L P R H R A L

661 CGCACAGCCCCATCCAGCCCCGTGTCTGGGAGCCTGTGCTCTGGAGGAGGTCCAATTG 720
R T A P I Q P R V W E P V P L E E V Q L

721 GTGTGGAGCCAGAAGTGGAGCAGTAGCTCCTGGTGGAAACCTAACCTGACCTGTGAA 780
V V E P E G G A V A P G G T V T L T C E

781 GTCCCTGCCAGCCCTCTCTCAATCACTGGATGAAGGATGGTGTGCCCTTGGCCCTT 840
P A Q P S P Q I H W M K D G V P L P L

841 CCCCCAGCCCTGTGTGATCCTCCTGAGATAGGGCCTCAGGACCAGGGAACCTACAGC 900
P P S P V L I L P E I G P Q D Q G T Y S

901 TGTGTGGCCACCCATCCAGCCACGGGCCCGGAGAAAGCCGTGTGTGAGTGTGAGTGT 960
C V A T H S S H G P Q E S R A V S I S I

961 ATCGAACCCAGGCGAGGAGGGGCCAACTGCAGGCTCTGTGGAGGATCAGGGCTGGAACT 1020
I E P G E E G P T A G S V G G S G L G T

1021 CTAGCCCTGGCCCTGGGATCCTGGGAGGCTGGGACAGCCGCCCTGTCTATTGGGGTC 1080
L A L A L G I L G G L G T A A L L I G V

1081 ATCTTGTGGCAAGGCGGCAACGCCGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 1140
I L W Q R R Q R R G E E R K A P E N Q E

1141 GAAGAGGAGGAGGCTGCAGAACTGAATCAGTGGAGGAACCTGAGGAGGAGGAGTGT 1200
E E E E R A E L N Q S E E P E A G E S S

1201 ACTGGAGGGCTTGGGGGCCACAGACAGATCCCATCCATCAGTCCCTTTTCTTTTC 1260
T G G P *

1261 CTTGAAGTGTCTGGCCTCAGACCAACTCTCTCTGTATAATCTCTCTCTGTATAACC 1320

1321 CCACCTTGCCAGCTTTCTCTACAAACAGAGCCCCCAAAATGATGATTAACACCTGA 1380

1381 CACATCTGCAAAAAAAAAAAAAA 1406